

### WHAT IS CLAIMED IS:

1. An improved optical mechanism of an optical mouse, implemented inside the optical mouse with a bottom opening, comprising:

a light device, to provide an incident light;

5 a light guiding device, to guide the incident light to pass through the bottom opening and thus project to a reflective plane;

a photosensor implemented in the optical mouse above the bottom opening, to receive a reflecting light generated on the reflective plane by reflecting the incident light; and

10 an absorbing layer coated and attached onto a surface around the photosensor, to absorb reflecting light not directly projected to the photosensor.

2. The improved optical mechanism as claimed in claim 1, wherein the light guiding device comprises of a first lens, a second lens, at least one prism and a cavity formed in a bottom of the light guiding device, such that the incident light is projected by the at least one prism to the reflective plane after being focused by the first lens, the second lens is implemented in the cavity to project the reflecting light to the photosensor after being focused, the cavity's opening faces directly to the bottom opening and the second lens is coaxially implemented with the photosensor.

3. The improved optical mechanism as claimed in claim 2, wherein the absorbing layer is coated/attached in the cavity adjacent to surface of the second lens surroundings to absorb reflecting light not directly projected to the second lens.

4. The improved optical mechanism as claimed in claim 1, wherein the light device is a light emitting diode (LED) die.

5. The improved optical mechanism as claimed in claim 1, wherein the absorbing layer is a black coating.

5         6. The improved optical mechanism as claimed in claim 1, wherein the absorbing layer is a layer produced by applying a surface processing to the surface adjacent to the photosensor surroundings.